REMARKS

The present application includes claims 37-54 and 57. Claims 37-54 and 57 have been rejected by the Examiner.

Claim 37 was rejected under 35 U.S.C. 103(a) as being unpatentable over Straube et al., U.S. Pat. Pub. No. 2002/0007287 (Straube) and further in view of Jamroga et al., U.S. Pat. No. 6,574,742 (Jamroga).

Claims 37-42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Levi et al., U.S. Pat. No. 6,804,778 (Levi) and further in view of Jamroga.

Claims 43-52 were rejected under 35 U.S.C. 102(e) as being anticipated by Rothschild et al., U.S. Pat. Pub. No. 2002/0019751 (Rothschild) and further in view of Jamroga.

Claims 53, 54 and 57 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild, further in view of Jamroga and further in view of Levi.

Rejections Under 35 U.S.C. § 103(a)

1.   Straube In View Of Jamroga

The Applicant next turns to the rejection of claim 37 under 35 U.S.C. § 103(a) as being unpatentable over Straube in view of Jamroga. Straube discusses archiving and retrieval of medical documents. (Straube, Abstract.) A copy of patent data is stored remotely to allow access to patient data from multiple sites. (Straube, Abstract.) However, rather than detecting an *error* in accessed medical data, Straube checks whether a "local copy has the same identifier or is newer than the copy on the database server 111" to determine whether the "local copy may be

used, thus avoiding a lengthy download." (Straube, para. [0038].) Thus, Straube relates to avoiding downloads by relying upon a local copy unless a newer version is present in the database. (Straube, paras. [0037]-[0039].) There is no error detection in the medical data via Straube. Furthermore, there is no status monitor disclosed in Straube. Thus, there is no teaching or suggestion of a status monitor detecting an error in accessed medical data. There is no teaching or suggestion in Straube of monitoring operations occurring at a data source using a status monitor. Additionally, there is no teaching or suggestion in Straube to use a status monitor to produce a trigger to transfer a copy of medical data from a remote data store to a data source.

Thus, several limitations recited in claim 37 of the present application are neither taught nor fairly suggested by Straube.

Turning to Jamroga, Jamroga discuses communication, storage, retrieval and delivery of information between a system and participating institutions. (Jamroga, Abstract.) While Jamroga provides data and images able to be searched from shared-access or remote locations. (Jamroga, column 5, lines 20-25.) However, Jamroga does not teach or suggest arbitrating access to medical data among multiple data requests. Rather, Jamroga simply discusses processing and directing requests according to type of request. (Jamroga, column 13, lines 45-50.) While, more effective control of data access and multiple requests is desirable and addressed by the present application, it is not disclosed by either Straube or Jamroga. Furthermore, Jamroga, among other things, neither teaches nor fairly suggests a status monitor as recited in claim 37.

Therefore, for at least the reasons discussed above, the Applicant respectfully submits that claim 37 should be allowable over Straube in view of Jamroga.

2. Levi In View Of Jamroga

The Applicant next turns to the rejection of claims 37-42 under 35 U.S.C. § 103(a) as being unpatentable over Levi in view of Jamroga. Levi relates to data communications and verification of outgoing data. (Levi, column 1, lines 13-14.) More specifically, Levi relates to methods of verifying the data transmitted by WWW servers to WWW users. (Levi, column 1, lines 17-30.) Levi discusses preventing the display of hacked content on web pages, rather than restoring medical data to a data source from a remote data store in order to ensure the medical data's quality. (Levi, column 2, lines 11-17.) Levi addresses problems encountered by server users that are caused by inadvertent or intentional data corruption at the server. (Levi, column 2, lines 11-23.) Levi describes a method for detecting hacker modification of a web site, rather than detecting errors in accessed medical data. (Levi, column 3, lines 29-42; column 6, lines 25-45; column 7, lines 10-30; column 10, lines 50-63; and column 11, lines 60-67.) If a web site or data signature has been hacked, replacement data is sent. (Levi, column 4, lines 53-61.)

However, Levi does not teach or suggest a *status monitor*, as recited in claims 37-42 of the present application. Levi does not teach or suggest that the status monitor detects an error in accessed data, monitors operation occurring at the data source, and produces a trigger to transfer a copy of medical data from a remote data store to the data source when an error is detected. These limitations are recited in claims 37-42. Additionally, Levi does not disclose a trigger, as recited in claims 37-42. Furthermore, as stated by the Examiner, Levi does not disclose medical data. Rather, Levi discusses web sites viewable by users. The Applicant respectfully submits that web sites available for viewing over the Internet are not necessarily analogous to medical

data and error detection and replacement of medical data as recited in claims 37-42 of the present application.

Additionally, as stated by the Examiner, Levi does not teach or suggest "arbitrating access to said medical data among multiple data requests" as recited in independent claim 37. Rather, Levi, as discussed above, merely describes a verification system for checking the quality of data prior to transmission. The verification process does not arbitrate access to a remote data store in cases where multiple sources attempt to access the remote data store or a single data source transmits multiple requests to the remote data store. The verification process does not provide access to a remote data store based on priority that may include system priority, timing priority, or request priority, for example. The invention described in Levi merely monitors the quality of requested data and, if the requested data has been corrupted, provides some form of uncorrupted data to the user. Thus, Levi does not teach or suggest elements of at least claim 37. As discussed above, Jamroga also fails to disclose arbitrating access to said medical data among multiple data requests and fails to remedy other deficiencies present in Levi with respect to the limitations recited in claim 37 and its dependent claims 38-42.

In addition, Levi does not teach the limitations of dependent claims 38-42. For example, Levi does not teach a "transferring step [that] further comprises verifying said transferring of medical data from said remote data store to said data source" as recited in dependent claim 40. Levi discusses the verification of a code intended to signify that data "was generated in an approved manner." (Levi, column 7, lines 55-56.) This verification merely confirms "that a certain communication was authorized." (Levi, column 7, line 65.) Levi also mentions the forwarding of a user's data request to a "remote site, where [the request] is

answered, verified, signed and transmitted." (Levi, column 13, lines 25-27.) Although Levi

discusses verification of authorization and of a user's data requests, Levi does not teach

verification of the <u>transferring</u> of data, as recited in claim 40 of the present application.

Similarly, Levi does not teach a "transferring step [that] further comprises transferring

said medical data from a directory representative of said data source at said remote data store to

said data source" as recited in dependent claim 42. Levi describes a partial or full "copy of the

original data, [which is] maintained at a secure location." (Levi, column 12, lines 52-54.)

Although Levi discusses a copy of the original data, Levi does not teach a <u>directory</u> representing

the original data, as recited in claim 42 of the present application. The Applicant notes that

hindsight should not be used when viewing the pending claims of a previously filed application.

In Re John Fritch, 972 F.2d 1260, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992). See also *Hodosh

v. Block Drug Co., Inc.*, 786 F.2d 1135, 1143 n.5, 229 U.S.P.Q. 182, 187 n.5 (Fed.Cir. 1986);

MPEP 2141.

Thus, the Applicant respectfully submits that independent claim 37 and corresponding

dependent claims 38-42 are neither taught nor suggested by Levi in view of Jamroga. Therefore,

the Applicant respectfully submits that claims 37-42 are in condition for allowance.

3.   **Rothschild In View Of Jamroga**

The Applicant next turns to the rejection of claims 43-52 under 35 U.S.C. § 103(a) as

being unpatentable over Rothschild in view of Jamroga. Rothschild discusses a system and

method for managing medical images. (Rothschild, para. [0001].) Rothschild provides a

medical image management system that includes a medical imaging system, a local image

workstation, and a central data management system. (Rothschild, para. [0038].) The medical imaging system produces an electronic record in a computer-readable format. (Rothschild, para. [0038].) The local image workstation communicates with the medical imaging system along a local interface to transfer the electronic record from the medical imaging system. (Rothschild, para. [0038].) The central data management system communicates with the local image workstation along a remote interface to transfer the electronic record to the central data management system. (Rothschild, para. [0038].) The central data management system is configured to **push** the electronic record to a pre-determined remote viewing system. (Rothschild, para. [0038].)

Rothschild also discusses a polling system located in each local image workstation. (Rothschild, para. [0184].) The polling system communicates with the central data management system. (Rothschild, para. [0184].) The central data management system holds data for which attempted delivery has failed in a delivery queue. (Rothschild, para. [0184].) The polling system includes a **connection** status monitor that tracks the Internet connection status of the module and identifies and stores the most recent IP address in an associated file. (Rothschild, para. [0185].) The connection status monitor provides the updated IP address to an IP notifier/data requester either directly or by way of an internal poller. (Rothschild, para. [0189].) When an event such as booting the computer, establishing an Internet connection, a change in the IP address, or the passing of a predetermined time interval occurs, the polling system requests queued data located in the central management system. (Rothschild, para. [0185].)

Rothschild has attempted to improve on the distribution of electronic records and medical images. Rothschild patent describes a medical imaging system, a central data management

system, and one or more remote image viewing systems. Within the medical imaging system,

medical images of a patient are obtained and transferred to a local image workstation. The local

image workstation stores the images locally and then automatically pushes, or transfers, the

images from the medical imaging system to the central data management system. Once the

images are received at the central data management system, the images are once again stored at

that location and are automatically pushed, or transferred, to the remote viewing system(s).

At each instance of transferring the images (once from the imaging system to the central

data management system and a second time from the central data management system to the

remote viewing system), the images are automatically pushed or transferred from one point to

another as soon as possible. In other words, the images are pushed, without any trigger or

request, from a first location to a second location as soon as possible. The purpose of this feature

of Rothschild is to ensure that images are routed to doctors at remote viewing systems as soon as

possible:

> In contrast to other known efforts at providing a medical image management
> ASP, the present invention employs "push" delivery of medical images directly to
> the referring physician's office or offices, which may be completed according to
> the invention **immediately after generating the image at the medical imaging
> center**. The use of the push methodology directly addresses the needs of referring
> physicians prescribe [sic] the imaging study in order to diagnose or treat a patient.
> Clearly, these healthcare providers want the images delivered to their office(s)
> just as they have the [x-ray] films delivered today. With push delivery of
> electronic image records according to the invention, the image delivery will take
> place in the background and be on the physician's desktop computer ready for
> review whenever the doctor is ready to view them.

(Rothschild, para. [0132].) Therefore, Rothschild describes a system and method that obtains

and transfers images along a routing path (that includes the imaging, data management, and

viewing systems), where the images are pushed from one point to another along the path as soon

as possible. While the images may be locally stored at each point along the routing path, the images are automatically routed, as soon as possible, from one point to another, without waiting for a trigger from any other device, processor, or process. That is, each location in the routing path independently sends the images to the next point in the routing path without waiting for any other device, processor or process to command or instruct the location to transfer the image to the next point in the path.

However, Rothschild does not teach or suggest "detecting installation of said second data source with a status monitor, wherein said installation includes at least one of addition, upgrade and replacement of said second data source" as recited in independent claim 43, as amended. Rothschild discusses a polling system providing "image delivery to locations or modules that do not have static IP addresses." (Rothschild, para. [0091].) Rothschild discusses a remote module at the local workstation that "checks its IP address by way of software within the connection status monitor" of a polling system at the local workstation. (Rothschild, para. [0194].) The local workstation polling system notifies the central data management system of changes in the module's IP address to ensure that data is routed correctly. (Rothschild, paras. [0185]-[0188].) Whereas Rothschild describes a local workstation-based polling system detecting changes in the dynamic IP address of the remote module to which it is linked and mentions access by authorized individuals from locations other than normal delivery locations (Rothschild, para. [0131]), Rothschild does not disclose using a centralized status monitor to detect the installation of a new data source, such as an upgraded data source or a replacement data source, for example. The Applicant asserts that even if Rothschild detects an "access" by a user (which arguably it does not), that is distinct from detecting an "installation" of a data source.

As stated by the Examiner, Rothschild also does not teach or suggest "arbitrating access to said medical data among multiple data requests" as recited in independent claim 43, as amended. Rather, Rothschild, as discussed above, merely describes a polling system located in each local image workstation that polls the central data management system for queued data. The polling system does not arbitrate access to a remote data store in cases where multiple sources attempt to access the remote data store or a single data source transmits multiple requests to the remote data store. The polling system does not provide access to a remote data store based on priority that may include system priority, timing priority, or request priority, for example. As discussed above, Jamroga does not remedy deficiencies related to access arbitration, for example.

Further, Rothschild does not teach the limitations of dependent claims 44-52. For example, Rothschild does not teach a "transferring step [that] further comprises transferring said medical data from a directory representative of said first data source at said remote data store to said second data source" as recited in dependent claim 44. Rothschild describes a copy of an original electronic record that is stored at a central data management system. ([110]). Although Rothschild discusses a copy of the original data, Rothschild does not teach a remote data store that is organized with a <u>directory</u> representing the original data source, as recited in claim 44 of the present application.

Thus, for at least the reasons discussed above, the Applicant respectfully submits that claims 43-52 should be allowable.

4. Rothschild In View Of Jamroga And Further In View Of Levi

The Applicant next turns to the rejection of claims 53, 54 and 57 under 35 U.S.C. 103(a) as being unpatentable over Rothschild in view of Jamroga and further in view of Levi. Rothschild relates to management of medical images; Jamroga relates to communication, storage, retrieval and delivery of information between a system and participating institutions; and Levi relates to data verification to ensure the quality of data transmitted.

As discussed above, none of Rothschild, Jamroga or Levi teaches or suggests a "status monitor [that] is adapted to arbitrate access to the medical data among multiple data requests" as recited in independent claim 53, as amended. Rothschild merely describes a polling system that polls the central data management system for queued data. The Rothschild polling system does not arbitrate access to a remote data store in cases where multiple sources attempt to access the remote data store or a single data source transmits multiple requests to the remote data store. Rather, the polling system of Rothschild merely monitors the network connection state of an existing workstation and polls a central data management system for data that was unable to be delivered. (Rothschild, para. [0085].) Similarly, Levi merely describes a verification system for checking the quality of data prior to transmission. The Levi verification process does not arbitrate access to a remote data store in cases where multiple sources attempt to access the remote data store or a single data source transmits multiple requests to the remote data store. The invention described in Levi merely monitors the quality of requested data and, if the requested data has been corrupted, provides some form of uncorrupted data to the user. Jamroga processes and directs requests to an appropriate server according to type of request but does not disclose any arbitration between requests. (Jamroga, column 13, lines 45-50.) Accordingly,

none of Rothschild, Jamroga or Levi, alone or in combination, teaches or suggests the limitations of independent claim 53 of the present application.

In addition, none of Rothschild, Jamroga or Levi teaches the limitations of dependent claims 54 and 57. For example, Rothschild, Jamroga and Levi do not teach a "centralized remote data store [that] stores the medical data in a directory representative of said first data source" as recited in dependent claim 57. Rothschild discusses a copy of an original electronic record that is stored at a central data management system. ([110]). Although Rothschild describes a copy of the original data, Rothschild, Jamroga and Levi do not teach a remote data store that is organized with a <u>directory</u> representing the original data source, as recited in claim 57 of the present application.

Thus, the Applicant respectfully submits that independent claim 53 and corresponding dependent claims 54 and 57 are not taught or suggested by Rothschild, Jamroga or Levi, alone or in combination. Therefore, the Applicant respectfully submits that claims 53, 54 and 57 are in condition for allowance.

The Applicant respectfully submits that the claims of the present application should be allowable over the prior art.
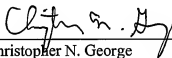
CONCLUSION

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GEMS-IT, Account No. 502401.

Respectfully submitted,

Date: _____ January 3, 2007 _____

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